

## MEETING MINUTES (FINAL)

### **Town of Marana Technical Biology Team and the City of Tucson Technical Advisory Committee Joint Town of Marana/City of Tucson Meeting**

### **HABITAT CONSERVATION PLANNING Wednesday, September 19, 2007, 10:45 – 12:45 Arizona Game and Fish Department Tucson, Arizona**

#### **ATTENDEES**

##### Technical Biology Team (TBT) and Technical Advisory Committee (TAC) members present:

Dennis Abbate – TAC and TBT (Arizona Game and Fish Department)  
Mima Falk – TAC (U.S. Fish and Wildlife Service)  
Rich Glinski – TAC and TBT (Arizona Game and Fish Department – *retired*)  
Trevor Hare – TAC and TBT (Coalition for Sonoran Desert Protection)  
Ralph Marra – TAC (Tucson Water)  
Guy McPherson – TAC (University of Arizona School of Natural Resources)  
Scott Richardson – TBT (U.S. Fish and Wildlife Service)  
Linwood Smith – TAC (Environmental Planning Group, Inc.)

##### Other attendees present:

Ann Audrey (City of Tucson – Office of Conservation and Sustainable Development)  
Jamie Brown (City of Tucson – Office of Conservation and Sustainable Development)  
Carolyn Campbell (Coalition for Sonoran Desert Protection)  
Jennifer Christelman (Town of Marana)  
Cheryl Doyle (Arizona State Land Department)  
Carianne Funicelli (RECON)  
Colby Henley (RECON)  
Leslie Liberti (City of Tucson – Office of Conservation and Sustainable Development)  
Ries Lindley (Tucson Water)  
Brian Powell (Pima County)

#### **Overview of the Town of Marana's HCP Program**

Jennifer provided background on the Town of Marana's (hereinafter "Marana") HCP process. Originally, six species were considered conservation targets until the HCP process stalled. Since then, the cactus ferruginous pygmy-owl (CFPO) was de-listed from the Endangered Species Act (ESA). This begged the question of whether or not Marana still needed an HCP. Decision-makers concluded that it would be prudent to continue the HCP effort to 1) cover species should they become listed and also 2) use the HCP as a planning tool given Marana's rapid growth. In January of 2007, Marana started the HCP process again by reconvening the Technical Biology Team (TBT) and the Stakeholder Working Group (SWG). Modifications were made to those groups and Marana has moved very quickly since January. Currently, the HCP covers 13 species,

including:

- 1) Cactus ferruginous pygmy-owl
- 2) Lesser long-nosed bat
- 3) Burrowing Owl
- 4) Pale Townsend's big-eared bat
- 5) Ground snake (valley form)
- 6) Tucson shovel-nosed snake
- 7) Southwestern willow flycatcher
- 8) Western yellow-billed cuckoo
- 9) Merriam's mesquite mouse
- 10) Mexican garter snake
- 11) Desert tortoise - Sonoran population
- 12) Lowland leopard frog
- 13) Talus snail

Jennifer said that Mexican garter snake, lowland leopard frog, Western yellow-billed cuckoo, and the Southwestern willow flycatcher represented the riparian species. She said that the permit area will also include the Town's boundary. The next draft of the HCP will be released next month and it will include draft conservation measures for each species. The draft for public review is scheduled for release in December 2008, with the final scheduled for completion in 2009.

### **Overview of the City of Tucson's (COT) HCP Program**

Leslie reported that the HCP process started about four years ago with the pursuing of U.S. Fish and Wildlife Service (FWS) funding for the HCP and the setting up of both a Stakeholder Advisory Committee (SAC) and Technical Advisory Committee (TAC). She said that a major difference between the Marana and COT planning areas is that the majority of the COT is developed, urban land but that the HCP planning area does not include those highly urbanized areas within the COT boundary. Three areas were considered important for conservation planning, including the Santa Cruz River of which there are approximately 15 miles within the COT limits. The second area encompasses lands south of I-10 known as the Southlands, but also includes some areas north of I-10. Sizeable areas of the Southlands were annexed in 2000 and are largely composed of State Trust land. The COT is putting together the HCP for the area and Pima County is conducting the Lee Moore Wash Basin Study.

The third important area for the COT's HCP effort is the approximately 23,000 acres of farmland purchased in Avra Valley by the COT with Tucson Water funds in the 1970's for water rights. These lands are meant for future water supply projects such as brine and evaporation ponds, wells, boosters, and other water-resource related uses. Given uncertainties about water demand and availability in the long term, we do not know exactly what will happen on those lands, just the minimum and maximum impacts that might occur. What happens in the next 10 to 15 years will likely determine the level of impact. Maximum development would involve 7,500 acres. The COT is currently planning for seven species in Avra Valley including the cactus ferruginous pygmy-owl, burrowing owl, Western yellow-billed cuckoo, Tucson shovel-nosed snake, Mexican garter snake, pale Townsend's big-eared bat, and lesser long-nosed bat.

Ralph mentioned that Marana is also looking at desalination or membrane treatment of water and asked if these would take place on Marana land. Jennifer replied by saying that her staff is working with all Marana departments to get a comprehensive list of all capital improvement projects including water, transportation, and others. Ralph then asked if these would include partnerships with other jurisdictions such as Oro Valley and Jennifer responded “yes.” Ann asked if this will include future development and Jennifer responded by saying “yes.”

Leslie passed around a map that includes Marana’s floodway and Conservation Priority Areas (CPAs) identified through COT HCP process, to provide a context of what the COT is currently considering in proximity to Marana’s boundary. The TAC’s CPA and “No Touch” areas were created differently, which include riparian areas as well as undisturbed uplands. The first cut in determining priority areas involved identifying land still in a fairly undisturbed state. Also of interest were areas that could buffer higher quality lands or areas with higher restoration potential. The yellow areas on the map (CPA) are what TAC members determined warranting protection and the pink areas on the map (“No Touch”) are what TAC members suggest protecting at an even higher level. Leslie said that about 5,400 acres, or 27%, of the total Avra Valley Planning Sub-area is currently considered CPA, of which “No Touch” is a subset. Trevor asked if there were any “No Touch” lands on the far southeast parcel of the map. Leslie responded that the TAC added those parcels after doing the habitat modeling. Trevor then asked about the parcel adjacent to the Ironwood Forest National Monument known as “Trust 205” and if there was any way the TAC could overlay “No Touch” designation on it.

Scott asked the TAC if there were any other conservation measures beyond CPA and “No Touch.” Leslie responded that burrowing owl habitat and wildlife corridors are two things not included in the CPA and “No Touch” areas. She noted that the TAC has not yet finalized the draft conservation measures. She continued by saying that if there is a project that will occur outside the CPA/“No Touch” zones and it impacts the wildlife corridor or burrowing owl habitat, then mitigation will be required for the disturbance. If development/disturbance occurs within the CPA, then additional mitigation will be required preferably permanent protection of “No Touch” areas. If no “No Touch” areas are developed, then restoration of potential habitat will be the secondary mitigation choice. Carolyn asked if the TAC has identified non-COT land for the development of this strategy to which Leslie responded that the TAC has not looked beyond COT lands closely. The TAC tried to account for that by seeing what Pima County is protecting. Carolyn then asked if the TAC has identified private lands that should be considered for protection under the next open space and flood control bond measure. Leslie said not yet, and that the TAC has just focused on COT lands. Scott added that if there are lands outside COT lands that should be protected there is some money available through Endangered Species Act (ESA) Section 6 funding. Leslie said that this is why we felt this discussion would be valuable to see what Marana and Pima County are doing.

Carianne asked about the timetable for the COT Avra Valley HCP. Leslie said that the final draft is currently scheduled for delivery to the U.S. Fish and Wildlife Service in the beginning of 2009. She continued by saying that the TAC is limited in the Southlands until more planning has been done and so the two HCPs were split (Avra Valley and Southlands). Ralph asked about the Santa Cruz River planning area and Leslie responded by saying that the consensus of the TAC

was that there were no areas of significant habitat, except for frog ponds, for the Species of Concern because of lack of water and good vegetation. Trevor suggested that Marana look into what the COT has created in terms of the grassroots alternative for Army Corps of Engineers restoration efforts along the Santa Cruz River. Leslie said that maybe it is worth getting a grassroots alternative going for the Marana area.

### **Riparian and Other Species**

Leslie said that there could be opportunities for collaboration on several riparian species such as Western yellow-billed cuckoo (YBC), Mexican garter snake, Southwestern willow flycatcher, and lowland leopard frog. Except for the Simpson Farm site, the COT does not have any perennial flowing water on any of the properties. Whether the water continues to flow through that stretch is beyond the control of the COT. Of those four species, the COT is specifically addressing YBC. Species experts helped the TAC to understand that YBC do not just utilize cottonwood/willow habitat, but also mesquite habitat for both dispersal and breeding. Thus, for YBC, the TAC has expanded beyond the Simpson Farm site to lands identified for CFPO overwintering habitat, which likely have sufficient structure to support YBC. Scott asked if the Simpson Farm site lies within Marana's boundary and Leslie answered by saying "no," but some COT properties are adjacent to or very close to the Town of Marana boundary.

Jennifer said that, unlike the COT, the Town of Marana does have perennial flow through its planning area primarily in the form of Santa Cruz River effluent. The Santa Cruz River corridor provides habitat for the four riparian species as well as the cactus ferruginous pygmy-owl (CFPO), Lesser long-nosed bat (LLNB) and pale Townsend's big-eared bat (PTBB). Colby added that conservation measures would include existing protection within the floodway. Also, for developments that do occur within the floodway, Marana will have the Pima County environmentally sensitive lands protection apply. Prior to any work in that zone, there will an investigation to see if there would be negative impacts on species. If so, pre-construction surveys will be conducted.

Leslie said that the COT's conservation measures are similar. The intent is for the Conservation Priority Areas (CPAs) to capture the priority habitat areas. Mapped CPA captures 100 percent of the modeled YBC habitat. If development can be kept outside of these areas, then YBC habitat will be protected. For the Simpson Farm site, the TAC has asked the Tucson Audubon Society to change their bird survey protocols to specifically include YBC. The Simpson Farm site is interesting because it is a connection between what Marana is doing and what the COT is doing. Leslie said that the COT does not have much control over the habitat for riparian obligates because the COT can not control future flow in the Santa Cruz River.

Scott asked that since he had just heard from both Marana and the COT that neither has control over future flows in the Santa Cruz River to please explain why this is the case. Ralph said that once in-channel recharge facility permits go into place, they do not require that water remain in the channel. Scott asked that if Pima County, Marana, and the COT have HCP processes, why there cannot be some coordinated effort in trying to adopt conservation measures for the Santa Cruz River. In other words, if these entities are doing HCPs, shouldn't they coordinate and make sure that they have control over flows? Ralph responded that the entity that has most control over the water is the U.S. Department of the Interior (DOI), which also takes tribal interests into

account. If the DOI does something significant or if other entities with water rights do something significant, then that could change the flows in the Santa Cruz River. Ralph stated that he couldn't speak for the Bureau but the latter would most likely want to keep all its potential options viable. Trevor asked if the DOI could sell their allocation to, for example, the COT, tribes, or others. Ralph responded that they potentially could but it might be best to hear about the potential opportunities from local representatives of the Bureau. Ann mentioned that the Army Corps of Engineers (ACE) project, Tres Rios del Norte, also creates uncertainty about water in the Santa Cruz River. Leslie said that she does not think there would be a Federal commitment to a project without adequate commitments of water. In its current form, the Tres Rios del Norte preferred alternative requires more water than exists in the channel. Thus, we need to look at what we can do with a lot less water.

Scott said that, from a U.S. Fish and Wildlife Service point-of-view, staff is more concerned about a project's impact on water supply in terms of the HCP. Ann mentioned that Tucson Audubon Society had a hydrologic study completed at the Trico Road Bridge which provides valuable information for the community about how much water flows in the area. Trevor asked if we should try to get U.S. Bureau of Reclamation staff involved in the HCP process. Ralph said that it might be valuable to get the Bureau of Reclamation involved in future HCP discussions. Leslie said that she was uncomfortable with the discussion of water because of the many uncertainties around the subject, such as Proposition 200, climate change, and others. Trevor said that we need to consider uncertain circumstances as part of the HCP to which Leslie replied that if the price of water skyrockets in the future, that could trump everything we do. Ralph added that all entities involved in that discussion want to keep their prerogatives alive in case of water shortage. Ralph added that Oro Valley is removing effluent to reclaim for its own needs. Scott asked if more people in the Tucson region translates to more effluent. Ralph responded by saying that this is true but there are no excess water supplies that are not already incorporated into planning scenarios.

For YBC conservation, Leslie asked if there is a way through rainwater harvesting that could help support the habitat needs of the species since rainwater is not incorporated into water planning scenarios. Trevor responded by saying that water harvesting would not help enough to maintain breeding habitat, but that maybe dispersal habitat of mesquites could be supported this way. Ralph believed that historically there was natural perennial flow in the Santa Cruz River from around San Xavier and beyond "A Mountain," but that flow stopped around Roger Road. He could check references to confirm this as necessary. Trevor asked whether or not effluent might be removed from the Santa Cruz River to provide reclaimed water for golf courses. He asked if this would compete with in-channel riparian vegetation using this water. Ralph responded, saying that right now, effluent is plentiful, but there will likely be competition of this renewable supply in the future.

Leslie noted that we, as a community, do not talk about the relative value of water uses, such as water dedicated to habitat restoration. Ralph added that there are 10,000-acre feet of water per year in the conservation effluent pool and that there are conversations in various places occurring about its allocation to potential riparian projects. Carolyn asked if groups such as these (HCP technical groups) shouldn't be discussing allocation of the conservation effluent pool since these groups are the ones planning at this level. She asked how these conversations could occur and if

the HCP processes are far enough along or specific enough to enable this conversation. Rich said that we did talk about this in the beginning of the HCP process after Ralph told us that there is no guarantee about the amount of water in the Santa Cruz River. Given much uncertainty, Rich asked about restoring mesquite habitat since these trees are better adapted to less water than hydriparian species. Dennis asked if there are any projections of agriculture or mining uses in the future. Ann replied that the Arizona Department of Water Resources (ADWR) projects 25 years into the future such that the downward trend of agriculture use is countered with increased use by residents because developers will purchase water rights. Ralph said that the thought is that there will be less ground water pumping and more reliance on renewable supplies. Growth is supposed to occur on renewable supplies and groundwater rights are not sustainable.

Leslie said that, for the purposes of the HCP, protecting what we have now is what we can do as far as the COT's jurisdiction is concerned. Outside the HCP effort is the discussion of using the 10,000 acre feet of conservation effluent for riparian restoration. Trevor suggesting getting the Managers from the COT and Marana together with Pima County staff and the two HCP technical teams. Carolyn suggested that the meeting focus solely on the 10,000 acre feet of conservation effluent and the HCPs.

### **Burrowing Owl (BUOW)**

Leslie began the discussion by saying that AGFD staff surveyed properties in Avra Valley and that the maps do not distinguish between nesting and foraging habitat. With the results of the AGFD survey, the TAC identified portions of the planning area with suitable habitat for the burrowing owl, containing characteristics such as suitable soils, presence of burrows, etc. Trevor noted that the map should include the far southeast corner property as habitat to which Leslie responded that AGFD did include it. *[Action Item: OCSD staff check to make sure that BUOW GIS files are current.]* Leslie said that using the concept of Burrowing Owl Management Areas (BOMAs) in Avra Valley makes sense because of the mapping AGFD has done in the area. When AGFD staff returned to the previously occupied burrows last summer, 40 percent of them had been destroyed by sheet flooding. Therefore, soil stability and prey base are concerns. With BOMAs, we have the opportunity to enhance habitat for the burrowing owl. Thus, we feel comfortable that burrowing owl conservation is being addressed even though the BOMAs are not necessarily part of the Conservation Priority Areas (CPAs).

Jennifer added that Marana is also using BOMAs for development mitigation. Scott asked if the COT TAC had identified specific locations for BOMAs. Leslie responded that specific locations have not been identified, but that four BOMAs are currently planned. She added that their location depends on what happens with development, which is uncertain, and so the TAC wants flexibility with siting them. Rich noted that these questions about BOMAs prompted the formation of the burrowing owl working group. Scott noted that AGFD staff has answered some questions in a white paper, such as issues with hacking. *[Action Item: Dennis will send the BUOW white paper to Leslie.]*

Jennifer wondered about opportunities for joint work between the COT and Marana on burrowing owl conservation. Leslie asked how big BOMAs need to be in accordance with the AGFD BUOW white paper. Jennifer responded that a BOMA must be at least 30 acres and must be delineated as such. Ralph asked about funding if owls must be removed. Scott said that it is all

done through a permit per the Migratory Bird Treaty Act because some mortality is expected, yet the burrowing owl is not Federally listed. Carolyn asked about requirements for funding if BUOW are removed for tracking, follow-up, etc. Scott responded that he is working with the Migratory Bird Treaty Act staff on the state permitting process to see if the process can be improved in determining if owls should be removed or not. Leslie said that, depending on what recommendations emerge from the working group, 2,500 acres of COT property in the northernmost part of the Avra Valley permit area (e.g. Simpson Farm site, etc.), on which the COT has agreements with Tucson Audubon Society, could possibly be used for BUOW conservation. This would be in addition to BOMAs.

Leslie then asked about a specific proposal in which a large location is used for burrowing owl conservation as opposed to four, scattered areas. Scott said that the working group could look at that proposal, though there might be advantages to having scattered BOMAs. Colby added that Marana intends to sprinkle burrows throughout its study area (beyond BOMAs). Scott responded by saying that he likes coordination between the COT and Marana on burrowing owl conservation because Marana has no land specified for BOMAS (they'll get one or two but are struggling for more than that) and the COT does. Rich said that burrowing owl burrows are clumped. Trevor added that, as part of burrowing owl conservation, we also need to protect fossorial animals by lowering the speed limit on all roads in the area to 15 mph.

Leslie then distributed maps with pale Townsend's big-eared bat (PTBB) and Tucson shovel-nosed snake habitat. She noted that the TAC used the same model as Marana did, indicated by where soil, elevation, and natural communities correspond to habitat needs. She said that what the map shows are areas in a natural state (blue areas on the map), while green areas have habitat restoration potential but are not currently considered habitat. Thus, there is currently not a lot of suitable habitat. Leslie also distributed a ground snake habitat map and noted that Phil Rosen does not think that the species will be federally listed and will probably be a species that drops out of the HCP process for the COT. Jennifer noted that habitat maps had been distributed and that, as far as LLNB and PTBB are concerned, protection of the Santa Cruz River and its associated floodway would be Marana's approach to their habitat conservation. Leslie asked Scott that, given what is planned for Marana's HCP, if it changes the priorities of the COT's corridors. Scott responded by saying that everything that the COT has identified is still equally valid.

### **Pima County MSCP Monitoring**

Brian Powell, Ecological Monitoring Coordinator for Pima County Natural Resources Parks and Recreation, began his presentation by distributing a one page, two-sided handout entitled "Pima County Ecological Monitoring Program Update." He said that when he worked as a RECON employee, staff began the process of developing a monitoring program for Pima County's Multi-species Conservation Plan (MSCP) not thinking too much about individual species, but instead, thinking broadly. They worked with the Science Technical Advisory Team to the MSCP and had workshops on the topics of landscape pattern, vertebrates, etc. from which monitoring parameters emerged. Next, they held a managers workshop to see what monitoring parameters would be most useful for them. This information was gathered into the "Ecological Effectiveness Monitoring Plan: Phase 1," which was distributed to the TAC and TBT members prior to this meeting. Pima County received an ESA Section 6 grant for this effort and thus, they will hire a

team to assist him in developing the monitoring plan. Brian said that the basic approach is to create a monitoring program that is novel from an MSCP perspective. The process will conclude in approximately one year to 16 months. At that time, they should know approximately how much the monitoring program will cost, which will go to the Pima County Board of Supervisors for a vote probably in the winter of 2008-2009.

There will be opportunities to get involved in advisory groups and they want to reach across the table to Marana and the COT to avoid duplication as they know that monitoring is difficult to do correctly. He added that, in the Tucson area, the National Park Service and the Bureau of Land Management are currently involved in monitoring, which will make this process easier. Leslie asked Brian, how, when looking at a portion of land in Avra Valley, he would suggest that the COT monitor these lands but also tie into and contribute to a regional approach. Mima suggested that she look at the parameters outlined in the Phase I handbook. Scott added that there are broad landscape parameters. When monitoring these, there will be protocols with monitoring stations that will feed back into regional efforts with the data entered at the station. Thus, the key comes down to information sharing, which needs to be as consistent as possible with Pima County's efforts.

Rich said that when one measures and monitors day-to-day, one comes to a decision point about how to continue and asked how this will apply to Pima County's process. Brian said that it is necessary to identify thresholds early, such as not letting groundwater get below a certain level if we want to maintain a particular habitat. Trevor asked if there would need to be an Intergovernmental Agreement (IGA) that says that if groundwater is below a certain level, then this jurisdiction is responsible for rectifying the situation. Leslie said that would be a long, involved discussion. Ralph noted that Marana or the COT would not necessarily make decisions about groundwater levels. Colby suggested an adaptive management response in which the question becomes, "What does this data mean for this plan?" So, instead of bringing everyone together for some agreement, if groundwater goes up or down, then the HCP will prescribe action based on that data. Jennifer said that Marana's discussion of monitoring should be consistent with Pima County's and thinks that would be useful regionally, to establish this common methodology. Mima said that, while Pima County is involved in this larger, landscape level monitoring scheme, for each HCP, monitoring needs to be specific. Trevor said that what Marana does may have impacts on the COT. Leslie said that she is all for cooperation but needs to make sure that the COT meets requirements for its own HCP. And, while Pima County is looking at monitoring methods for its MSCP, the COT needs to take a long, hard look at what it needs to do. In other words, the COT cannot just wait and see what Pima County does in terms of monitoring.

Dennis asked Brian if Pima County would consider what is happening on adjacent lands (e.g. Tohono O'odham or private lands) with landscape level issues such as migratory bird movement. Brian responded by saying that they are just focusing on the MSCP permit area to keep it manageable. However, he said that other agencies are doing monitoring. To coordinate the monitoring of birds at the national and international levels, Pima County can keep this bigger picture in mind, considering itself a small part of the larger whole. Colby added that he did not think that Pima County considers their approach as the end-all-be-all for all jurisdictions and HCPs. Mima said that the County has taken a broader approach, but it will be challenged to bring



it down to the species level. Brian responded that they cannot monitor everything and so they must choose the best indicators. Trevor added that the Coalition for Sonoran Desert Protection proposed monitoring a subset of priority vulnerable species identified in Pima County's MSCP.

**Adjournment**

Leslie and Jennifer concluded the meeting by thanking the attendees and expressing hope that the multi-jurisdictional conversations would continue.